# THE GENUS KUNZELLA AND A CLOSELY RELATED NEW GENUS YOUNGSZELLA (HOMOPTERA: CICADELLIDAE)<sup>1,2</sup>

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ABSTRACT: The genus Kunzella is revised to include only the type-species marginella. A new genus Youngszella is described for the species Dikraneura pseudomarginella (designated type-species), which has been confused with Kunzella marginella. One other species (transferred to the genus Youngszella) is russea (new combination).

The genius *Kunzella* was described by Young (1952) with the typespecies as *Dikraneura marginella*. The species was confused with another species *D. pseudomarginella* Caldwell almost from the time *D. marginella* was first described. This paper is an attempt to properly place these two species and the one closely related species. Since this involved a misidentified type species of a genus it was submitted to the Commission on Zoological Nomenclature, but since no action was taken I am now designating the type species for *Kunzella* under the new (1-1-2000) rules of nomenclature.

D. marginella was first described as D. marginatus by DeLong (1924). This species was renamed the next year as D. marginella by Baker (1925), because marginatus was a homonym of marginata Sahlberg (1871). DeLong originally described the species on the basis of three specimens from Florida. These specimens were examined in the DeLong Collection, Ohio State University, and are without type labels. I designate one of the males as the lectotype of this species, and the other male and the female as paralectotypes. All three specimens fit the description as given by DeLong and were collected in Miami, Florida, April 2 and 3, 1921.

D. marginella was adequately described by DeLong (1924) in the original description, and DeLong and Caldwell (1937a) added the description of the male genitalia. The type series constitutes all the specimens of this species I have seen. The distribution of this species is questionable as presently it is only known from the Miami area.

All specimens attributed to *D. marginella*, except the types, are the species *D. pseudomarginella* Caldwell described in 1952. Caldwell noted this confusion at that time, however Young (1952) did not, so his description of *D. marginella* is really that of *D. pseudomarginella*. Young apparently assumed there was but one species and set up the genus *Kunzella* on that assumption.

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These two species have quite different male genitalia and belong in separate genera. Therefore I modify couplet 17 (on page 43) in the key to the Dikrineurini in Young's 1952 paper as follows:

These two genera and the species included in each are as follows:

# Kunzella Young

Kunzella Young 1952, p. 65. Type-species Dikraneura marginella Baker.

This genus includes only the type-species.

# Kunzella marginella Baker)

Dikraneura marginatus DeLong 1924, p. 68.

Dikraneura marginata Ball and DeLong 1925, p. 311 (in part)

Dikraneura marginella Baker 1925, p. 160. New name for D. marginata DeLong [not D. marginata Sahlberg 1871)

Dikraneura marginella McAtee 1926, p.164. (in part)

Dikraneura marginella Osbore 1928, p. 267. (in part)

Dikraneura marginella Lawson 1930, p. 41. (in part)

Dikraneura marginella Osborn 1935, p. 189. (in part) Dikraneura marginella Wolcott 1936, p. 91. (in part)

Dikraneura marginella DeLong and Caldwell 1937a. p. 22. (in part)

Dikraneura marginella DeLong and Caldweil 1937b. p. 60. (in part)

Dikraneura marginella DeLong and Knull 1946, p. 68 (in part)

Kunzeana marginella Oman 1949, p. 83. (in part)

Dikraneura marginella Wolcott 1950, p. 130. (in part)

Dikraneura marginella Caldwell, in Caldwell and Martorell 1952, p. 107.

Kunzella marginella Young 1952, p. 65. (in part)

This species is only known from the type series from Florida. It was described and illustrated (Plate VII, fig. 6) by DeLong (1924), and the male genitalia were described and illustrated (Plate I) by DeLong and Caldwell (1937a). The face of both sexes is quite distinct in that it is light brown with a darker brown transverse band just below the antennal bases. Otherwise the color pattern is very similar to that of most species of *Kunzeana*. The male genitalia are quite unique and are illustrated by DeLong and Caldwell (1937a). The pygofer is quite stout, heavily pigmented, with the dorsal apex curved dorsad. The aedeagus is a backward c-shaped structure, in lateral view, with the apex directed anteriorly.

# Youngszella Freytag, NEW GENUS

Type-species Dikraneura pseudomarginella Caldwell.

This genus is closely related to *Kunzella* and *Kunzeana*, and differs only in the facal color pattern and the type of male genitalia. Characters shared by these genera are the following: hind wing with complete marginal vein, vannal veins fused, and first cubital vein branched. *Kunzella* and *Youngszella* have a y-shaped connective, and *Kunzeana* differs by having a u-shaped connective. *Kunzella* and *Youngszella* can be separated by the characters given in the above key. Young (1952) really adequately describes this genus under the name *Kunzella* as he did not describe *D. marginella* but really described *D. pseudomarginella*. The genus is characterized by having the characters of *Kunzeana*, except the color of the face is lighter just below the margin with a very dark transverse line through the middle of this lighter area (illustrated in Caldwell (1952) plate 47). Also the male genitalia are quite different from *Kunzeana*, in that the process of the pygofer is ventral, coming from the base, and quite long, extending along the line of the plate. There are two species in this genus.

### Youngszella pseudomarginella (Caldwell) NEW COMBINATION

Dikraneura pseudomarginella Caldwell 1952, p. 106. Kunzeila marginella Young 1952. p. 65. (in part)

All references under *Kunzella marginella* above, from Ball and DeLong (1925) to Walcott (1950), also refer to this species in part as all Neotropical specimens belong to this species. The species also occurs in Florida as Caldwell (1952) mentions.

This species is similar to *marginella*, except for the face which is described under the generic discussion. The male genitalia are quite different and are illustrated by both Caldwell (1952) Plate 45 and Young (1952) Plate 23.

I have seen specimens from the United States (Florida), Cuba, Dominican Republic, Puerto Rico; Costa Rica, Nicaragua. Honduras, Panama, and Venezuela.

# Youngszella russea (McAtee) NEW COMBINATION

Dikraneura russea McAtee 1926, p. 160. Dikraneura russea Oman 1949, p. 83. Kunzella russea Young 1952, p.65.

I have not seen this species, but I place it in the same genus as *pseudo-marginata* following Young's indication that they are congeneric. It was described from two specimens (one male and one female) from Honduras. Until

the types can be seen I feel it is best to retain the name as a separate species. Since I have only seen one species of *Youngszella* from Central America it is possible that this species and *pseudomarginata* are synonyms.

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#### LITERATURE CITED

- Baker C. F. 1925. Nomenclatorial notes on the Jassoidea, Ill. Phillippine J. Sci. 27:159-160.
  Ball, E. D. & D. M. DeLong. 1925. The genus *Dikraneura* and its allies in North America. Ann. Entomol. Soc. Amer. 18:324-340, pls. 21-23.
- Caldwell, J. S. & L. P. Martorell. 1952. Review of the Auchenorynchous Homoptera of Puerto Rico. Part 1: Cicadellidae. Puerto Rico Univ. J. Agr. 34:1-132, i-vii illus.
- **DeLong. D. M.** 1924. Some new Cicadellidae (Homoptera) from the southern United States. New York Entomol. Soc. J. 32:63-69, pl. 7.
- **DeLong, D. M. & J. S. Caldwell.** 1937a. The genus *Dikraneura* A study of male genitalia with descriptions of new species. Entomol. Soc. Wash. Proc. 39:17-34, pls 1-3.
- DeLong, D. M. & J. S. Caldwell. 1937b. Check list of the Cicadellidae (Homoptera) of America, north of Mexico. 1-93. p.
- DeLong, D. M. & D. J. Knull. 1946. Check list of the Cicadellidae (Homoptera) of America, north of Mexico. Ohio State Univ. Press, Grad. School Stud., Biol. Sci. Ser. I. 1-102 p.
- McAtee, W. L. 1926. Notes on Neotropical Eupteryginae, with a key to the varieties of *Alebra albostriella* (Homoptera: Jassidae). New York Entomol. Soc. J. 34:141-174, pls. 19-20.
- Oman, P. W. 1949. The Nearctic leafhoppers (Homoptera:Cicadellidae). A generic classification and check list. Wash. Entomol. Soc. Mem. 3:1-253, pls. 1-44.
- Young, D. A. 1952. A reclassification of western Hemisphere Typhlocybinae (Homoptera, Cicadellidae). Kansas Univ. Sci. Bul. 35:1-217, 38 pls.

(All literature can also be found in General Catalogue of the Homoptera Fascicle VI Cicadelloidea Bibliography of the Cicadelloidea (Homoptera: Auchenorhyncha). Agr. Res. Ser. USDA by Z. P. Metcalf 1964.